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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

RAMOS FELICIANO, ELISEO

ART UNIT

PAPER NUMBER

2682

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/397,300

Applicant(s)
VALO et al.

Examiner
ELISEO RAMOS-FELICIANO

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Aug 14, 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on Aug 14, 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

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DETAILED ACTION

Drawings

1. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on August 14, 2002 have been approved. A proper drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The correction to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371 © of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. **Claims 1-4, 6, and 8-11** are rejected under 35 U.S.C. 102(e) as being anticipated by Suzuki (US Patent Number 6,044,067).

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Regarding **claims 1, 3 and 11**, Suzuki discloses a mobile terminal (MS) and a method for transmission rate control; see title and abstract. A TDMA signal is divided in frames, wherein the frames are divided in time slots, e.g. 25 time slots; see column 1, lines 23 & 58-64, column 3, lines 56-67, and Figures 1-3. The transmission rate of communication between a base station and a mobile station/terminal (MS) is changed by modifying the number (amount) of time slots used; see column 4, lines 40-58. The number of time slots to be used read as a “bearer” as claimed.

The mobile terminal (MS) measures a power signal from a base station, and determines if there is a need for changing (modifying) the transmission rate, i.e., the number (amount) of time slots used; see column 17, lines 45-60. In other words, the mobile terminal (MS) detects the need for bearer modification as claimed. Two consecutive time slots are used as claimed; see e.g. column 4, lines 50-51 & 63.

The detection step could be accomplished, e.g., by a status detecting means that detects a communication status (status indications); see column 2, lines 38-47.

The mobile terminal (MS) includes transceiving means and control means as claimed; see Figures 4 and 14. The transceiving means communicate with a mobile network element, e.g. a base station A or B using the modifiable bearer explained above. The controller of the MS (control means) control the process of changing the bearer, i.e. the negotiation. See e.g. column 4, lines 40-58.

Regarding **claim 2**, Suzuki discloses everything claimed as applied above (see rejection of *claim 1*). In addition, the frames are transmitted over the air interface; see Figure 14.

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Regarding **claim 4**, Suzuki discloses everything claimed as applied above (see rejection of *claim 1*). In addition, the bearer modification could be lowering the transmission rate (downgrading); see column 2, line 35 & 43-44. But could also be increasing (upgrading) as suggested at column 17, lines 54-60.

Regarding **claims 6 and 9**, Suzuki discloses everything claimed as applied above (see rejection of *claim 1*). In addition, the status indication explained before reads as either a flow control indication or an ending indication as claimed, because the indication could be interpreted as a control of the rate flow or an end of previous transmission rate. See col. 2, lines 43-47.

Regarding **claims 8 and 10**, Suzuki discloses everything claimed as applied above (see rejection of *claims 1 and 6*). In addition, as explained above, two indications need to be detected. Therefore, a counter as claimed is needed for determining when the two indications are detected.

The bearer modification could be lowering the transmission rate (downgrading); see column 2, line 35 & 43-44. The downgrading step takes effect after the detection of the two indications as claimed. Hence, Suzuki meet all the claimed limitations.

4. **Claims 12, 15 and 17** are rejected under 35 U.S.C. 102(e) as being anticipated by Snowden et al. (US Patent Number 5,974,032).

Regarding **claim 12, 15 and 17**, Snowden et al. discloses a method and apparatus for adjusting a data rate in a communication system. The system includes call receivers 2 (mobile terminal) and satellites 1 (network element) for exchanging a plurality of data units (block 420) with the call receivers, as exhibited in Figures 1 and 6-7. At least one data unit includes a bit rate

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indicator 460 (status bit) which is analyzed by the call receivers 2 (mobile terminal) to determine a change or adjustment in the data rate used to exchange the data units; see column 9, lines 24-67.

Circuitry for providing (e.g. controller 76, Figure 5) the data unit that includes the bit rate indicator 460 (status bit) as well as circuitry for analyzing (e.g. processor 39, Figure 3) the status bit is included; see e.g. Figures 8-9, and the abstract.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 5 and 7** are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki (US Patent Number 6,044,067) in view of the knowledge generally available to one of ordinary skill in the art.

Regarding **claim 5**, Suzuki discloses everything claimed as applied above (see rejection of *claim 1*). In addition, the type of terminal (e.g. GSM) and service (e.g. HSCSD), *inter alia*, are requirements of a particular system. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to implement Suzuki communication system using those particular types of terminals (e.g. GSM) and services (e.g. HSCSD) as claimed because of design choice.

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Regarding **claim 7**, Suzuki discloses everything claimed as applied above (see rejection of *claim 6*). In addition, as explained above, two indications need to be detected. Therefore, a counter as claimed is needed for determining when the two indications are detected. Therefore, if not inherent, then obvious.

7. **Claims 13-14, 16 and 17** are rejected under 35 U.S.C. 103(a) as being unpatentable over Snowden et al. (US Patent Number 5,974,032) in view of Suzuki (US Patent Number 6,044,067).

Regarding **claims 13-14, 16 and 17**, Snowden et al. discloses everything claimed as applied above (see *claims 12 and 15*). In addition, it is the call receiver 2 (mobile terminal) who analyzes the bit rate indicator 460 (status bit) to determine a change or adjustment in the data rate used to exchange the data units; see step 950, Figure 9.

However, Snowden et al. fails to specify that the data rate is changed by changing the number of time slots, and that it is the mobile terminal who request such change.

As illustrated by Suzuki these are well known features for TDMA systems. Suzuki teaches that the data transmission rate between a base station (e.g. Snowden et al.'s satellite 1) and a mobile station/terminal (e.g. Snowden et al.'s call receiver 2) is changed by modifying the number of time slots used; see column 4, lines 40-58. The request may be originated at the mobile terminal; see column 17, lines 45-60.

Therefore, it would have been obvious at the time the invention was made to change the data rate by changing the number of time slots and originating the change request at Snowden et al.'s mobile terminal because the system is TDMA.

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Citation of Pertinent Prior Art

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Li (U.S. Patent Number 5,673,266) see title, abstract, and Figure 4;

Kinnunen et al. (U.S. Patent Number 6,167,079) see title, and abstract.

Response to Arguments

9. Applicant's arguments filed August 14, 2002 have been fully considered but they are not persuasive.

In response to applicant's argument that the mobile terminal of Suzuki does not detect the need for bearer modification and that does not include means to detect such status indications, attention is directed to column 2, lines 41-43 where Suzuki clearly discloses that the invention includes "status detecting means for detecting a communication status" or status indications, from which a "rate adjusting means" determines the need for data rate adjustment (bearer modification).

In response to applicant's argument that Suzuki does not detect the need for bearer modification from status data in data communicated from a network element, attention is directed to column 19, lines 58-60 and column 20, lines 32-34 where Suzuki clearly discloses that the invention includes "information receiving means for receiving a predetermined communication status information from a third station". This "third station" is an element of the network; therefore, a network element as claimed. The information is being received at the mobile station.

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Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

11. Any response to this Office action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314

for formal communications intended for entry, informal communications or draft communications; in the case of informal or draft communications, please label "PROPOSED" or "DRAFT".

Hand-delivered responses should be brought to

Crystal Park II
2121 Crystal Drive
Arlington, VA
Sixth Floor (Receptionist).

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12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eliseo Ramos-Feliciano whose telephone number is (703) 305-0078. The examiner can normally be reached on Monday through Thursday (first week of bi-week) and Monday through Friday (second week of bi-week) from 8:30 a.m. to 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin, can be reached on (703) 308-6739. The fax phone number for this Group is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700, or call Group customer service at (703) 306-0377.

ELISEO RAMOS-FELICIANO
PATENT EXAMINER

ERF/erf
November 1, 2002.



VIVIAN CHIN
SUPERVISORY PATENT EXAMINER
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11/4/02